Complete Summary

GUIDELINE TITLE

Low back pain. Early management of persistent non-specific low back pain.

BIBLIOGRAPHIC SOURCE(S)

National Collaborating Centre for Primary Care. Low back pain. Early management of persistent non-specific low back pain. London (UK): National Institute for Health and Clinical Excellence (NICE); 2009 May. 25 p. (Clinical guideline; no. 88).

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Persistent or recurrentÂ low back pain, defined as non-specific low back pain that has lasted for more than 6 weeks but for less than 12 months

Note: The management of the following conditions is not covered by this guideline:

- Radicular pain resulting from nerve root compression
- Cauda equina syndrome (this should be treated as a surgical emergency requiring immediate referral)

GUIDELINE CATEGORY

Counseling
Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Chiropractic
Family Practice
Internal Medicine
Orthopedic Surgery
Physical Medicine and Rehabilitation
Psychology
Radiology
Sports Medicine

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Chiropractors
Health Care Providers
Health Plans
Hospitals
Managed Care Organizations
Nurses
Pharmacists
Physician Assistants
Physicians
Psychologists/Non-physician Behavioral Health Clinicians

GUIDELINE OBJECTIVE(S)

- To offer best practice advice on the care of people with nonspecific low back pain
- To provide recommendations to clinicians and others about clinical assessment, pharmacological and non-pharmacological treatments, and referral to surgery

TARGET POPULATION

- People aged 18 or older presenting with symptoms of "non-specific" (simple) low back pain (LBP); specifically LBP that has not resolved within 6 weeks of initial onset, consultation, or exacerbation, up to a period of 12 months
- People who present with predominant "non-specific" LBP that may or may not radiate to the limbs, is not associated with motorneurological deficit, and has not resolved within 6 weeks of initial onset, consultation, or exacerbation, up to a period of 12 months
- No relevant patient subgroups have been identified that may need special consideration with respect to clinical management (such as gender or ethnicity)

Groups that will not be covered:

- Individuals who have LBP because of specific spinal pathologies, including:
    - Conditions with a select and uniform pathology of a mechanical nature (for example, spondylolisthesis, postoperative pain, pelvic ring pain, scoliosis, vertebral fracture, or congenital diseases)
    - Conditions of a non-mechanical nature (for example, ankylosing spondylitis or diseases of the viscera)
    - Neurological disorders (including cauda equina syndrome)
    - Serious spinal pathology (for example, neoplasms, infections or osteoporotic collapse)
- People with radiculopathy and/or nerve root pain (unilateral leg pain worse than the back pain, pain radiating to the foot or toes, numbness and paraesthesia in same distribution, which is associated with motor neurological deficit)
- Children under the age of 18 years
- People with acute LBP (less than 6 weeks' duration)
- People with non-specific LBP of greater than 12 months duration

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

Assessment and imaging (magnetic resonance imaging only when certain conditions such as malignancy, infection, or spinal fusion are suspected)

Treatment/Management

1. Providing information and education and assessing patient preferences
2. Physical activity and exercise
3. Manual therapy (spinal manipulation, spinal mobilization, and massage)
4. Acupuncture
5. Combined physical and psychological treatment programme
6. Pharmacological therapies
    - Paracetamol
    - Opioids
    - Nonsteroidal anti-inflammatory drugs (NSAIDs)/COX-2 (cyclooxygenase-2) inhibitors
    - Tricyclic antidepressants
7. Referral for spinal fusion surgery

Note: Treatment and management optionsÂ for non-specific low back pain that were considered but not recommended include:

- Injections of therapeutic substances into the back
- Interferential therapy
- X-ray of the lumbar spine
- Laser therapy
- Therapeutic ultrasound
- Transcutaneous electrical nerve stimulation
- Lumbar supports
- Traction

- Selective serotonin reuptake inhibitors
- Referral for the following procedures:
    - Intradiscal electrothermal therapy
    - Percutaneous intradiscal radiofrequency thermocoagulation
    - Radiofrequency facet joint denervation

MAJOR OUTCOMES CONSIDERED

- Disability scores
- Pain scores
- Psychological distress
- Safety
- Adverse events

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): This guideline was developed by the National Collaborating Centre for Primary Care (NCC-PC) on behalf of the National Institute for Health and Clinical Excellence (NICE). See the "Availability of Companion Documents" field for the full version of this guidance.

Literature Search Strategy for Clinical Evidence

Systematic literature searches are undertaken to identify published evidence to answer the clinical questions identified by the methodology team and the Guideline Development Group (GDG). The information scientist developed search strategies for each question, with guidance from the GDG, using relevant Medical Subject Headings (MeSH)Â or indexing terms, and free text terms. Searches were limited to English language only. Searches were conducted between May 2007 and May 2008. Updated searches for all questions were carried out in July 2008 to identify any recently published evidence. Full details of the sources and databases searched and the strategies are available in Appendix G of the full version of the original guideline (see "Availability of Companion Documents" field).

An initial scoping search for published guidelines, systematic reviews, economic evaluations, and ongoing research was carried out on the following databases or websites: National Library for Health (NLH) Guidelines Finder, National Guidelines Clearinghouse, Scottish Intercollegiate Guidelines Network (SIGN), Guidelines International Network (GIN), Canadian Medical Association (CMA) Infobase (Canadian guidelines), National Health and Medical Research Council (NHMRC) Clinical Practice Guidelines (Australian Guidelines), New Zealand Guidelines Group, British Medical Journal (BMJ) Clinical Evidence, Cochrane Database of Systematic Reviews (CDSR), Database of Abstracts of Reviews of Effects (DARE)

and Heath Technology Assessment Database (HTA), National Health Service (NHS) Economic Evaluations Database (NHSEED), National Research Register and Current Controlled Trials.

For each clinical question the following bibliographic databases were searched from their inception to the latest date available: Database of Systematic Reviews (CDSR), Database of Abstracts of Reviews of Effects (DARE), Health Technology Database (HTA), MEDLINE, EMBASE, CINAHL, CENTRAL (Cochrane Controlled Trials Register) and PsycINFO. When appropriate to the question AMED (Allied and Complementary Medicine Database) was also searched.

The search strategies were developed in MEDLINE and then adapted for searching in other bibliographic databases. Methodological search filters designed to limit searches to systematic reviews or randomised controlled trials were used for clinical effectiveness questions. These were developed by the Centre for Reviews and Dissemination (CRD) and The Cochrane Collaboration. For all other questions, no restriction was placed on study design.

Databases of the results of the searches for each question or topic area were created using the bibliographic management software Reference Manager.

Identifying the Evidence

After the search of titles and abstracts was undertaken, full papers were obtained if they appeared to address the key clinical question (KCQ). The highest level of evidence was sought. The GDG agreed that only randomized controlled trials and systematic reviews (of randomized controlled trials) should be considered for selection. Observational studies and surveys were felt appropriate for only one KCQ on adverse events of manual therapy. Expert consensus was used when randomised control trials were not available. Following a critical review of the full text paper, articles not relevant to the subject in question were excluded. Studies that did not report on relevant outcomes were also excluded. On the advice of the GDG randomised controlled trials that reported outcomes on less than 20 participants in each intervention arm were excluded as these have insufficient power. Studies including participants with low back pain for longer than 1 year were accepted if the information provided in the paper suggested participants had recurring pain but were not suffering from chronic severe disabling low back pain. Usual care was the chosen comparator in most KCQ, and the GDG agreed to define it as usual care provided by general practitioners (GPs). Studies were selected with this definition in mind, and where there was doubt about whether a study´s specific comparator was relevant the GDG was consulted and made the final decision.

Economic Literature Search Strategy

The economic literature was identified by conducting searches in NHS Economic Evaluations Database (NHSEED) and in MEDLINE and EMBASE using an economics search strategy developed by the School of Health and Related Research (ScHARR) at the University of Sheffield.

In most cases, searches were carried out for systematic reviews (SR) and randomized controlled trials (RCTs), along with health economic (HE) literature.

The SR searches are listed in Appendix G of the full guideline document. The MEDLINE filters used for both RCTs and the health economic literature are listed in Appendix G in the full guideline documentÂ (see the "Availability of Companion Documents" field).

Identified titles and abstracts from the economic searches were reviewed by a health economist and full papers obtained as appropriate. No criteria for study design were imposed a priori. In this way the searches were not constrained toÂ RCTs containing formal economic evaluations.

Studies were included in the cost-effectiveness evidence review if:

- The study population meets the inclusion criteria for the review of clinical evidence as set out in the NICE scope document and as agreed by the GDG
- An incremental cost-effectiveness analysis is performed with results presented as cost per Quality Adjusted Life Year (QALY)
- The study and costing perspective is that of the UK health service

If no studies were found which met all of the above criteria, then studies which met some of the criteria such as non-UK cost per QALY studies, or studies which take a broader costing perspective, or non-QALY cost-effectiveness analyses were considered for review and presentation to the GDG.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus
Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

1++: High-quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias

1+: Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias

1-: Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias

2++:High-quality systematic reviews of case-control or cohort studies; high-quality case-control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal

2+: Well-conducted case-control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal

2-: Case-control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal

3: Non-analytic studies (e.g., case reports, case series)

4: Expert opinion

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): This guideline was developed by the National Collaborating Centre for Primary Care (NCC-PC) on behalf of the National Institute for Health and Clinical Excellence (NICE). See the "Availability of Companion Documents" field for the full version of this guidance.

Critical Appraisal of the Evidence

From the papers retrieved, the Health Service Research Fellow (HSRF) synthesised the evidence for each question or questions into a narrative summary. These form the basis of this guideline. Each study was critically appraised using the Institute's criteria for quality assessment and the information extracted for included studies is given in Appendix C of the full version of the guideline document (see the "Availability of Companion Documents" field). Background papers, for example those used to set the clinical scene in the narrative summaries, were referenced but not extracted.

Economic Analysis

The essence of economic evaluation is that it provides a balance sheet of the benefits and harms as well as the costs of each option. A well conducted economic evaluation will help to identify, measure, value, and compare costs and consequences of alternative policy options. Thus the starting point of an economic appraisal is to ensure that healthcare interventions are clinically effective and then also cost effective. Although NICE does not have a threshold for cost effectiveness, interventions with a cost per quality adjusted life year of up to 20,000 poundsÂ are deemed cost effective, those between 20-30,000 poundsÂ may be cost effective, and those above 30,000 poundsÂ are unlikely to be judged cost effective. If a particular treatment strategy were found to yield little health gain relative to the resources used, then it could be advantageous to re-deploy resources to other activities that yield greater health gain.

To assess the cost effectiveness of different management strategies in people with non specific low back pain a comprehensive systematic review of the economic literature relating to low back pain patients was conducted. For selected components of the guideline original cost effectiveness analyses were performed. The primary criteria applied for an intervention to be considered cost effective were either:

- The intervention dominated other relevant strategies (that is it is both less costly in terms of resource use and more clinically effective compared with the other relevant alternative strategies)
- The intervention cost less than 20,000 poundsÂ per quality-adjusted life-year (QALY) gained compared with the next best strategy (or usual care)

The full papers were critically appraised by the health economist using a standard validated checklist. A general descriptive overview of the studies, their quality, and conclusions was presented and summarised in the form of a narrative review (see also Appendix D of the full version of the guideline for the full extractions [see the "Availability of Companion Documents" field).

Each study was categorised as one of the following: cost effectiveness analysis or cost utility analysis (i.e., cost effectiveness analysis with effectiveness measured in terms of QALYs or life year gained). Some studies were categorised as 'cost consequences analyses' or 'cost minimization analyses'. These studies did not provide an overall measure of health gain or attempt to synthesise costs and benefits together. Such studies were considered as partial economic evaluations.

Cost Effectiveness Modelling

The GDG decided to conduct further economic analyses of combined physical and psychological (CPP) interventions. (See Section 9 of the full version of the guidelineÂ for a more detailed description of CPP interventions [see the "Availability of Companion Document" field.) This was because of an absence of published economic evaluations of CPP interventions, and because, if recommendations were made for such interventions based on clinical effectiveness, this would have important consequences for clinical practice and resource use in the National Health Service (NHS).

Therefore, a decision tree model was developed, with the aim of estimating the cost-effectiveness of a CPP intervention compared with a less-intensive intervention which did not contain a psychological component, in a hypothetical cohort of patients with low back pain. The full details of this economic evaluation are reported in Appendix E in the full version of the guideline (see the "Availability of Companion Documents" field).

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus
Informal Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Note from the National Guideline Clearinghouse (NGC): This guideline was developed by the National Collaborating Centre for Primary Care (NCC-PC) on behalf of the National Institute for Health and Clinical Excellence (NICE). See the "Availability of Companion Documents" field for the full version of this guidance.

The Development Team

The development team had the responsibility for this guideline throughout its development. They were responsible for preparing information for the Guideline Development Group (GDG), for drafting the guideline, and for responding to consultation comments.

The Guideline Development Group

A Chair was chosen for the group and his primary role was to facilitate and chair the GDG meetings.

GDGs are working groups consisting of a range of members with the experience and expertise needed to address the scope of the guideline. Nominations for GDG members were invited from the relevant stakeholder organisations which were sent the draft scope of the guideline with some guidance on the expertise needed. Two patient representatives and nine healthcare professionals were invited to join the GDG.

Nominees who were not selected for the GDG were invited to act as Expert Peer Reviewers and were sent drafts of the guideline by the Institute during the consultation periods and invited to submit comments using the same process as stakeholders.

Each member of the GDG served as an individual expert in their own right and not as a representative of their nominating organisation, although they were encouraged to keep the nominating organisation informed of progress.

Guideline Development Group Meetings

The GDG met at 5 to 6 weekly intervals for 16 months to review the evidence identified by the development team, to comment on its quality and relevance, and to develop recommendations for clinical practice based on the available evidence. The recommendations were agreed by the full GDG.

Developing Key Clinical Questions

The first step in the development of the guideline was to refine the guideline scope into a series of key clinical questions (KCQs). These KCQs formed the starting point for the subsequent review and as a guide to facilitate the development of recommendations by the GDG.

The KCQs were developed by the GDG and with assistance from the methodology team. The KCQs were refined into specific evidence-based questions (EBQs) specifying interventions to search and outcomes to be searched for by the methodology team and these EBQs formed the basis of the literature searching, appraisal and synthesis.

The total list of KCQs identified is listed in Appendix B in the full version of the guideline (see the "Availability of Companion Documents" field). The development team, in liaison with the GDG, identified those KCQs where a full literature search and critical appraisal were essential.

Forming Recommendations

In preparation for each meeting, the narrative and extractions for the questions being discussed were made available to the GDG one week before the scheduled GDG meeting. These documents were available on a closed intranet site and sent by post to those members who requested it.

GDG members were expected to have read the narratives and extractions before attending each meeting. The GDG discussed the evidence at the meeting and agreed evidence statements and recommendations. Any changes were made to the electronic version of the text on a laptop computer and projected onto a screen until the GDG were satisfied with these.

All work from the meetings was posted on the closed intranet site following the meeting, as a matter of record and for referral by the GDG members.

Areas without Evidence and Consensus Methodology

The table of clinical questions in Appendix B of the full version of the guidelineÂ indicates which questions were searched.

In cases where evidence was sparse, the GDG derived the recommendations via informal consensus methods, using extrapolated evidence where appropriate. All details of how the recommendations were derived can be seen in the â˜Evidence to recommendations´ section of each of the chapters of the full version of the guideline (see the "Availability of Companion Documents" field).

Much of the evidence reviewed were small studies with insufficient power. The GDG considered that that there was a need for more well designed randomised controlled trials to be conducted in a number of areas.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

- A general descriptive overview of health economic studies, their quality, and conclusions are presented and summarised in the form of a narrative review in the full version of the guidelineÂ (see the "Availability ofÂ CompanionÂ Documents" field)Â (see also Appendix D of the full version of the for the full extractions).
- A decision tree model was developed with the aim of estimating the cost-effectiveness of a combined physical and psychological (CPP) intervention compared with a less-intensive intervention which did not contain a psychological component, in a hypothetical cohort of patients with low back pain. The full details of this economic evaluation are reported in Appendix E in the full version of the guideline (see theÂ "Availability of Companion Documents" field).

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The guideline was validated through two consultations.

1. The first draft of the guideline (The full guideline, National Institute for Clinical Excellence [NICE] guideline and Quick Reference Guide) were consulted with Stakeholders and comments were considered by the Guideline Development Group (GDG).
2. The final consultation draft of the full guideline, the NICE guideline and the Information for the Public were submitted to stakeholders for final comments.

The final draft was submitted to the Guideline Review Panel for review prior to publication.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Note from the National Guideline Clearinghouse (NGC): This guideline was developed by the National Collaborating Centre for Primary Care (NCC-PC) on behalf of the National Institute for Health and Clinical Excellence (NICE). See the "Availability of Companion Documents" field for the full version of this guidance.

Assessment and Imaging

Keep diagnosis under review.

Do not offer X-ray of the lumbar spine for the management of non-specific low back pain.

ConsiderÂ magnetic resonance imaging (MRI) when a diagnosis of spinal malignancy, infection, fracture, cauda equina syndrome, or ankylosing spondylitis or another inflammatory disorder is suspected.

Only offer an MRI scan for non-specific low back pain within the context of a referral for an opinion on spinal fusion (see "Referral for Surgery," below).

Information, Education and Patient Preferences

Provide people with advice and information to promote self-management of their low back pain.

Offer educational advice that:

- Includes information on the nature of non-specific low back pain
- Encourages the person to be physically active and continue with normal activities as far as possible.

Include an educational component consistent with this guideline as part of other interventions, but do not offer stand-alone formal education programmes.

Take into account the person's expectations and preferences when considering recommended treatments, but do not use their expectations and preferences to predict their response to treatments.

Offer one of the following treatment options, taking into account patient preference: an exercise programme (see "Physical Activity and Exercise," below), a course of manual therapy (see "Manual Therapy," below), or a course of acupuncture (see "Invasive Procedures," below). Consider offering another of these options if the chosen treatment does not result in satisfactory improvement.

Physical Activity and Exercise

Advise people with low back pain that staying physically active is likely to be beneficial.

Advise people with low back pain to exercise.

Consider offering a structured exercise programme tailored to the person:

- This should comprise up to a maximum of eight sessions over a period of up to 12Â weeks.
- Offer a group supervised exercise programme, in a group of up to 10Â people.
- A one-to-one supervised exercise programme may be offered if a group programme is not suitable for a particular person.

Exercise programmes may include the following elements:

- Aerobic activity
- Movement instruction
- Muscle strengthening
- Postural control
- Stretching

Manual Therapy

The manual therapies reviewed were spinal manipulation (a low-amplitude, high-velocity movement at the limit of joint range that takes the joint beyond the passive range of movement), spinal mobilisation (joint movement within the normal range of motion), and massage (manual manipulation or mobilisation of soft tissues). Collectively these are all manual therapy. Mobilisation and massage are performed by a wide variety of practitioners. Manipulation can be performed by chiropractors and osteopaths, as well as by doctors and physiotherapists who have undergone specialist postgraduate training in manipulation.

Consider offering a course of manual therapy, including spinal manipulation, comprising up to a maximum of nine sessions over a period of up to 12 weeks.

Other Non-pharmacological Therapies

Electrotherapy Modalities

Do not offer laser therapy.

Do not offer interferential therapy.

Do not offer therapeutic ultrasound.

Transcutaneous Nerve Stimulation

Do not offer transcutaneous electrical nerve simulation (TENS).

Lumbar Supports

Do not offer lumbar supports.

Traction

Do not offer traction.

Invasive Procedures

Consider offering a course of acupuncture needling comprising up to a maximum of 10 sessions over a period of up to 12 weeks.

Do not offer injections of therapeutic substances into the back for non-specific low back pain.

Combined Physical and Psychological Treatment Programme

Consider referral for a combined physical and psychological treatment programme, comprising around 100 hours over a maximum of 8 weeks, for people who:

- Have received at least one less intensive treatmentÂ **and**
- Have high disability and/or significant psychological distress

Combined physical and psychological treatment programmes should include a cognitive behavioural approach and exercise.

Pharmacological Therapies

Both weak opioids and strong opioids are discussed in the recommendations in thisÂ section. Examples of weak opioids are codeine and dihydrocodeine (these areÂ sometimes combined with paracetamol as co-codamol orÂ co-dydramol, respectively).Â Examples of strong opioids are buprenorphine, diamorphine, fentanyl, and oxycodone.Â Some opioids, such as tramadol, are difficult to classify

because they can act like a weakÂ or strong opioid depending on the dose used and the circumstances.

No opioids,Â cyclooxygenase 2 (COX-2) inhibitors, or tricyclic antidepressants and only some non-steroidal anti-inflammatory drugs (NSAIDs) have a UK marketing authorisation for treating low back pain. If a drug without a marketing authorisation for this indication is prescribed, informed consent should be obtained and documented.

Advise the person to take regular paracetamol as the first medication option.

When paracetamol alone provides insufficient pain relief, offer:

- Non-steroidal anti-inflammatory drugs (NSAIDs) **and/or**
- Weak opioids

Take into account the individual risk of side effects and patient preference.

Give due consideration to the risk of side effects from NSAIDs, especially in:

- Older people
- Other people at increased risk of experiencing side effects

When offering treatment with an oral NSAID/COX-2Â inhibitor, the first choice should be either a standard NSAID or a COX-2 inhibitor. In either case, for people over 45 these should be co-prescribed with aÂ proton pump inhibitor (PPI), choosing the one with the lowest acquisition cost. (This recommendation is adapted from NICE clinical guidelineÂ 59; see theÂ National Guideline Clearinghouse [NGC] summary of the NICE clinical guideline, Osteoarthritis. The care and management of osteoarthritis in adults.)

Consider offering tricyclic antidepressants if other medications provide insufficient pain relief. Start at a low dosage and increase up to the maximum antidepressant dosage until therapeutic effect is achieved or unacceptable side effects prevent further increase.

Consider offering strong opioids for short-term use to people in severe pain.

Consider referral for specialist assessment for people who may require prolonged use of strong opioids.

Give due consideration to the risk of opioid dependence and side effects for both strong and weak opioids.

Base decisions on continuation of medications on individual response.

Do not offer selective serotonin reuptake inhibitors (SSRIs) for treating pain.

Referral for Surgery

Consider referral for an opinion on spinal fusion for people who:

- Have completed an optimal package of care, including a combined physical and psychological treatment programme (see section above) **and**
- Still have severe non-specific low back pain for which they would consider surgery

Offer anyone with psychological distress appropriate treatment for this before referral for an opinion on spinal fusion.

Refer the patient to a specialist spinal surgical service if spinal fusion is being considered. Give due consideration to the possible risks for that patient.

Do not refer people for any of the following procedures:

- Intradiscal electrothermal therapy (IDET)
- Percutaneous intradiscal radiofrequency thermocoagulation (PIRFT)
- Radiofrequency facet joint denervation

CLINICAL ALGORITHM(S)

A care pathway for the management of persistent non-specific low back pain is provided in both the full version of the guidelineÂ and in the quick reference guide (see "Availability of Companion Documents" field).

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is provided in the "clinical evidence" sections of the full version of the original guideline document.

In general, only randomized controlled trials and systematic reviews (of randomized controlled trials) were considered for evidence. Observational studies and surveys were felt appropriate for only one key clinical question on adverse events of manual therapy. Expert consensus was used when randomised control trials were not available.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate early management of persistent non-specific low back pain has the potential to:

- Reduce the number of people with disabling long-term back pain, and so reduce the personal, social, and economic impact of low back pain
- Reduce the pain and its impact on the person's day-to-day life, even if the pain cannot be cured completely

POTENTIAL HARMS

- Spinal manipulation is commonly associated with mild-to-moderate adverse effects. Serious complications following manipulation of the lumbar spine are rare.
- Side effects of pharmacological therapy, including gastrointestinal side effects associated with non-steroidal anti-inflammatory drugs (NSAIDs)
- Risk of opioid dependence for both strong and weak opioids

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- This guidance represents the view of the National Institute for Health and Clinical Excellence (NICE), which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer, and informed by the summary of product characteristics of any drugs they are considering.
- Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The National Institute for Health and Clinical Excellence (NICE) has developed tools to help organisations implement this guidance (listed below). These are available on the NICE Web site (http://guidance.nice.org.uk/CG88; see also the "Availability of Companion Documents" field).

- Slides highlighting key messages for local discussion
- Costing tools:
    - Costing report to estimate the national savings and costs associated with implementation
    - Costing template to estimate the local costs and savings involved
- Patient information leaflet
- Factsheet for commissioners
- Audit support for monitoring local practice

Key Priorities for Implementation

Information, Education and Patient Preferences

- Provide people with advice and information to promote self-management of their low back pain.
- Offer one of the following treatment options, taking into account patient preference: an exercise programme, a course of manual therapy, or a course of acupuncture. Consider offering another of these options if the chosen treatment does not result in satisfactory improvement.

Physical Activity and Exercise

- Consider offering a structured exercise programme tailored to the person:
    - This should comprise up to a maximum of eight sessions over a period of up to 12 weeks.
    - Offer a group supervised exercise programme, in a group of up to 10Â people.
    - A one-to-one supervised exercise programme may be offered if a group programme is not suitable for a particular person.

Manual Therapy*

- Consider offering a course of manual therapy, including spinal manipulation, comprising up to a maximum of nine sessions over a period of up to 12 weeks.

* The manual therapies reviewed were spinal manipulation, spinal mobilisation, and massage (see "Major Recommendations" field for further details). Collectively these are all manual therapy. Mobilisation and massage are performed by a wide variety of practitioners. Manipulation can be performed by chiropractors and osteopaths, as well as by doctors and physiotherapists who have undergone specialist postgraduate training in manipulation.

Invasive Procedures

- Consider offering a course of acupuncture needling comprising up to a maximum of 10 sessions over a period of up to 12 weeks.
- Do not offer injections of therapeutic substances into the back for non-specific low back pain.

Combined Physical and Psychological Treatment Programme

- Consider referral for a combined physical and psychological treatment programme, comprising around 100 hours over a maximum of 8 weeks, for people who:Â
    - Have received at least one less intensive treatment **and**
    - Have high disability and/or significant psychological distress

Assessment and Imaging

- Do not offer X-ray of the lumbar spine for the management of non-specific low back pain.
- Only offer an MRI (magnetic resonance imaging) scan for non-specific low back pain within the context of a referral for an opinion on spinal fusion

Referral for Surgery

- Consider referral for an opinion on spinal fusion for people who:Â
    - Have completed an optimal package of care, including a combined physical and psychological treatment programme **and**
    - Still have severe non-specific low back pain for which they would consider surgery

IMPLEMENTATION TOOLS

Audit Criteria/Indicators
Clinical Algorithm
Foreign Language Translations
Patient Resources
Quick Reference Guides/Physician Guides
Resources
Slide Presentation

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

National Collaborating Centre for Primary Care. Low back pain. Early management of persistent non-specific low back pain. London (UK): National Institute for Health and Clinical Excellence (NICE); 2009 May. 25 p. (Clinical guideline; no. 88).

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2009 May

GUIDELINE DEVELOPER(S)

National Collaborating Centre for Primary Care - National Government Agency [Non-U.S.]

SOURCE(S) OF FUNDING

National Institute for Health and Clinical Excellence (NICE)

GUIDELINE COMMITTEE

Guideline Development Group

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

At each Guideline Development Group (GDG) meeting, all GDG members declared any potential conflict of interests.

In accordance with guidance from the National Institute for Health and Clinical Excellence (NICE), all GDG members´ interests were recorded on a standard declaration form that covered consultancies, fee-paid work, share-holdings, fellowships, and support from the healthcare industry. Details of these can be seen in Appendix F of the full version of the guideline (see "Availability of Companion Documents" field).

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the National Institute for Health and Clinical Excellence (NICE) Web site.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Low back pain: early management of persistent non-specific low back pain. Full guideline. London (UK): National Institute for Health and Clinical Excellence; 2009 May. 240 p. (Clinical guideline; no. 88). Electronic copies: Available in Portable Document Format (PDF) from the National Institute for Health and Clinical Excellence (NICE) Web site.
- Low back pain: early management of persistent non-specific low back pain. Quick reference guide. London (UK): National Institute for Health and Clinical Excellence; 2009 May. 10 p. (Clinical guideline; no. 88). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Low back pain. Audit support. Implementing NICE guidance. London (UK): National Institute for Health and Clinical Excellence; 2009. 9 p. (Clinical guideline; no. 88). Electronic copies: Available from the NICE Web site.
- Low back pain. Costing report. Implementing NICE guidance. London (UK): National Institute for Health and Clinical Excellence; 2009 May. 43 p. (Clinical guideline; no. 88). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Low back pain. Costing template. Implementing NICE guidance. London (UK): National Institute for Health and Clinical Excellence; 2009 May. Various p. (Clinical guideline; no. 88). Electronic copies: Available from the NICE Web site.
- Low back pain. Implementing NICE guidance. Slide set. London (UK): National Institute for Health and Clinical Excellence; 2009. 19 p. (Clinical guideline; no. 88). Electronic copies: Available from the NICE Web site.
- Low back pain. Commissioning fact sheet. Implementing NICE guidance. London (UK): National Institute for Health and Clinical Excellence; 2009. 14 p. (Clinical guideline; no. 88). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- The guidelines manual 2007. London (UK): National Institute for Health and Clinical Excellence (NICE); 2007 April. Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.

Print copies: Available from NICE publications at 0845Â 003 7783 or e-mail publications@nice.org.uk. ref: N1865.

PATIENT RESOURCES

The following is available:

- Early management of persistent non-specific low back pain. Understanding NICE guidance - Information for people who use NHS services. London (UK): National Institute for Health and Clinical Excellence; 2009 May. 12 p. (Clinical guideline; no. 88). Electronic copies: Available in Portable Document Format (PDF) from the National Institute for Health and Clinical Excellence (NICE) Web site. Also available in Welsh from the NICE Web site.

Print copies: Available from NICE publications at 0845 003 7783 or e-mail publications@nice.org.uk ref: N1866.

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